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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,652	10/06/2003	Mark S. Lee	361752002300	7825

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EXAMINER	
KRUER, KEVIN R	
ART UNIT	**PAPER NUMBER**
1773	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

✓

Office Action Summary	**Application No.** 10/678,652	**Applicant(s)** LEE ET AL.
	Examiner Kevin R. Kruer	**Art Unit** 1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 October 2006_.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-18_ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-18_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 2, 2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not contain support for the limitation "a polyolefin resin layer containing at most 1% by weight of an ethylene." As noted by applicant, there is no explicit support in the original disclosure for said limitation. Furthermore, the disclosure of page 8 does not support said limitation. The examiner initially notes said disclosure supports one specific composition and does not implicitly demonstrate applicant had possession of the much broader genus of compositions comprising at most 1wt% of an ethylene. The examiner further notes the

disclosure state “4% ethylene” but does not state said percentage is a weight percent. Thus, the claimed composition is not implicitly supported said disclosure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cretekos et al (US 6,773,818) in view of Applicant’s admissions and Spence et al (US 6,106,659).

Cretekos teaches an oriented multi-layer film comprising a polyolefin (PP) core layer (col 5, lines 20+) and a metallocene catalyzed polypropylene homopolymer first skin layer (abstract). The first skin is metallizable (abstract) with aluminum so as to obtain an optical density of 1.5-5.0 (col 9, lines 1+). The laminate may further comprise a second skin layer on the opposite side of the core (abstract). Said second skin layer may comprise isotactic or syndiotactic polypropylene (col 3, lines 50+). Each of said skin layers should have a thickness of 0.5-5um (col 9, lines 10+) and may further comprise 0.002-0.5wt% anti-blocking agent (col 7,lines 1+). Both outer surfaces may be corona treated to obtain the desired surface tension level (col 8, lines 33+).

Cretekos does not teach corona treating in an atmosphere of carbon dioxide and nitrogen. However, Applicant admits corona treating in such atmospheres is known to produce high surface energy substrates and is superior to discharge treatment methods conducted in air or nitrogen (page 3 of the specification, 3rd paragraph). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize corona treat the layers of Cretekos in a carbon dioxide/nitrogen atmosphere because such treatments are superior to alternative corona treatments with regard to the resulting surface energy of the treated substrate.

Furthermore, neither reference teaches the claimed percentage of nitrogen functional groups. However, Spence teaches that corona treatment results in the functionalization of the surface with nitrogen and that the higher the functionalization the better the adhesion (col 18, lines 38+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the nitrogen functionalization of the surfaces taught in Cretekos. The motivation for doing so would have been to optimize the adhesion of said layer.

6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bothe et al (US 4,975,315) in view of Applicant's admissions and Spence et al (US 6,106,659).

Bothe teaches an oriented multi-layer film comprising a polypropylene core layer (abstract) and two polyolefinic facing layers abstract). Both facing layers (col 4, lines 59+) may comprise metallizable polypropylene homopolymer films (col 3, lines 1+) that have been corona treated (col 3, lines 33+). The metal may comprise aluminum (col 5, lines 5+) and is applied so as to obtain the claimed optical density (understood to be inherent to the thickness taught in col 5,lines 22+). Each of said skin layers should have a thickness of 0.2-3um (col 4, lines 51+) and may further comprise 0.001-0.2wt% anti-blocking agent (col 4,lines 35+). The metallizable surfaces may be corona treated (col 3, lines 32+).

Bothe does not teach corona treating in an atmosphere of carbon dioxide and nitrogen. However, Applicant admits corona treating in such atmospheres is known to produce high surface energy substrates and is superior to discharge treatment methods conducted in air or nitrogen (page 3 of the specification, 3rd paragraph). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize corona treat the layers of Bothe in a carbon dioxide/nitrogen atmosphere because such treatments are superior to alternative corona treatments with regard to the resulting surface energy of the treated substrate.

Furthermore, neither reference teaches the claimed percentage of nitrogen functional groups. However, Spence teaches that corona treatment results in the functionalization of the surface with nitrogen and that the higher the functionalization the better the adhesion (col 18, lines 38+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the nitrogen functionalization of the surfaces taught in Bothe. The motivation for doing so would have been to optimize the adhesion of said layer.

7. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al (US 5,292,563) in view of Applicant's admissions and Spence et al (US 6,106,659).

Peiffer teaches a multi-layer film comprising a polypropylene core layer and outer layers comprising anti-blocking agents (col 1, lines 7+). The outer layers comprise polypropylene (col 3, lines 57+) have a thickness of less than 0.5um (herein understood to read on "about 0.5um") (col 3, lines 64+) and may be metallized with metals such as aluminum so as to obtain the claimed optical density (understood to be inherent to the thickness taught in col 5, lines 11+). Each outer layer comprises 0.01-0.5wt% anti-blocking agent (col 4, lines 5+) and may be corona treated to obtain the desired adhesion (col 4, lines 16+).

Peiffer does not teach corona treating in an atmosphere of carbon dioxide and nitrogen. However, Applicant admits corona treating in such atmospheres is known to produce high surface energy substrates and is superior to discharge treatment methods conducted in air or nitrogen (page 3 of the specification, 3rd paragraph). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize corona treat the layers of Peiffer in a carbon dioxide/nitrogen atmosphere because such treatments are superior to alternative corona treatments with regard to the resulting surface energy of the treated substrate.

Furthermore, neither reference teaches the claimed percentage of nitrogen functional groups. However, Spence teaches that corona treatment results in the functionalization of the surface with nitrogen and that the higher the functionalization the better the adhesion (col 18, lines 38+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the nitrogen functionalization of the surfaces taught in Peiffer. The motivation for doing so would have been to optimize the adhesion of said layer.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sue et al (US 6,844,078).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

10. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al (US 6,916,526).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Double Patenting

11. Claims 1-18 are directed to an invention not patentably distinct from claims 1-15 of commonly assigned 6,844,078. Specifically, they are both drawn to a multilayer film corona treated to a desired nitrogen functionality level to form a metallizable layer

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 6,844,078, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

12. Claims 1-18 are directed to an invention not patentably distinct from claims 1-15 of commonly assigned 6,916,526. Specifically, they are both drawn to a multilayer film corona treated to a desired nitrogen functionality level to form a metallizable layer

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 6,916526, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin R. Kruer
Patent Examiner-Art Unit 1773